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**37 CFR 1.7(c) FILING RECEIPT AND
TRANSMITTAL LETTER WITH
AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT**

Neifeld Docket No.: OSEMDB30UPTUS
US/PCT Application/Patent No.: 10/581,316
Priority Data:
Inventor: BRADDOCK
Title: High Temperature Vacuum Evaporation Apparatus

Client Ref:
US/PCT File/Issue Date: 6/2/2006
USPTO Confirmation No.:

**THE FOLLOWING HAS BEEN RECEIVED IN THE U.S. PATENT OFFICE ON
THE DATE STAMPED HEREON:**

37 CFR 1.7(c) Filing Receipt and Transmittal Letter with Authorization to Charge Deposit Account (in duplicate)
37 CFR 1.97 Information Disclosure Statement and Authorization to Charge Deposit Account (in duplicate)
37 CFR 1.98(A)(1) Reference Citation Listing References U-001 - U-067, P-001 - P-005, F-001 - F-007, and O-001 - O-025 (8 pages)
Copies of References F-001 - F-007 and O-001 - O-025

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-2106. A duplicate copy of this sheet is enclosed.

6/19/06
DATE

Respectfully Submitted,

Richard A. Neifeld
Registration No. 35,299
Attorney of Record

Fees:	PcLaw Matter	Lawyer	Amount	Explanation	Date Entered	Initials
	OSEM0001	BTM	300	OSEMDB30UPTUS firm charge for preparing and filing an IDS.	6/19/2006	BTM
Fees:						
Disbursements:	PcLaw Matter	G/L Account	Amount	Explanation	Date Entered	Initials
		5010				

Printed: September 30, 2005 (1:31pm)

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.G./

10

Neifeld Ref: OSEMDB30UPCTUS



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Braddock

INT APP. NO: 10/581,316

FILED: 6/2/2006

FOR: High Temperature Vacuum Evaporation Apparatus

GAU: Unknown

EXAMINER: Unknown

PTO CONFIRMATION NO. Unknown

37 CFR 1.97 INFORMATION DISCLOSURE STATEMENT

ASSISTANT COMMISSIONER FOR PATENTS
ALEXANDRIA, VA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- ☒ The applicant(s) wish to make of record the references listed on the attached PTO-1449. Copies of the listed references are being submitted herewith or, were submitted in the parent or grandparent application, where required, as were either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references, or cited by the examiner.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- ☐ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- ☐ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

PETITION

- ☐ Applicant(s) hereby request consideration of the attached information. A check is attached in the amount of the Petition fee required under 37 CFR §1.17(p).

DEPOSIT ACCOUNT

- ☒ Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 50-2106. A duplicate copy of this sheet is enclosed.

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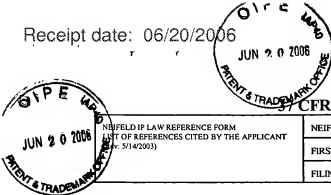
PATENT TRADEMARK OFFICE

Respectfully submitted,

Date

Richard A. Neifeld

Registration No. 35,299



37 CFR 1.98(A)(1) Reference Citation

 NIFIELD IP LAW REFERENCE FORM
 LIST OF REFERENCES CITED BY THE APPLICANT
 (Rev. 5/14/2003)

NEIFELD REF: OSEMDB30UPCTUS APPLICATION NO: 10/581,316

FIRST NAMED INVENTOR: Braddock

FILING DATE: June 2, 2006

GROUP ART UNIT: Unknown

LISTING OF UNITED STATES PATENTS

EXAMINER INITIALS	REFERENCE NUMBER (U SERIES)	PATENT NUMBER	ISSUE DATE	NAME OF PATENTEE OR APPLICANT	PAGE/LINE AND FIGURE/ELEMENT OF RELEVANT MATERIAL AND/OR IDENTIFICATION OF PRIORITY APPLICATION IN WHICH REFERENCE IS CITED
	U-1	3,950,273	4-1976	Jones	
	U-2	4,404,265	9-1983	Manasevit	
	U-3	4,410,902	10-1983	Malik	
	U-4	4,416,952	11-1983	Nishizawa et al.	
	U-5	4,561,915	12-1985	Mito	
	U-6	4,624,901	11-1986	Glass	
	U-7	4,671,777	6-1987	van Esdonk et al.	
	U-8	4,685,193	8-1987	Faria et al.	
	U-9	4,745,082	5-1988	Kwok	
	U-10	4,802,180	1-1989	Brandle, Jr. et al.	
	U-11	4,843,450	6-1989	Kirchner et al.	
	U-12	4,859,253	8-1989	Buchanan et al.	
	U-13	4,935,789	6-1990	Calviello	
	U-14	4,970,060	11-1990	Belt et al.	
	U-15	5,055,445	10-1991	Belt et al.	
	U-16	5,124,762	6-1992	Childs et al.	
	U-17	5,170,407	12-1992	Schubert et al.	
	U-18	5,270,798	12-1993	Pao et al.	
	U-19	5,323,053	6-1994	Luryi et al.	
	U-20	5,386,137	1-1995	Dell et al.	
	U-21	5,425,043	6-1995	Holonyak et al.	
	U-22	5,451,548	9-1995	Hunt et al.	
	U-23	5,491,712	2-1996	Lin et al.	
	U-24	5,550,089	8-1996	Dutta et al.	
Date:			Examiner's Signature:		

37 CFR 1.98(A)(1) Reference Citation

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev. 5/14/2003)	NEIFELD REF: OSEMDB30UPCTUS	APPLICATION NO: 10/581,316
	FIRST NAMED INVENTOR: Braddock	
	FILING DATE: June 2, 2006	GROUP ART UNIT: Unknown

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	U-25	5,597,768	1-1997	Passlack et al.	
	U-26	5,640,751	6-1997	Faria	
	U-27	5,665,658	9-1997	Passlack	
	U-28	5,693,565	12-1997	Camilletti et al.	
	U-29	5,729,563	3-1998	Wang et al.	
	U-30	5,767,388	6-1998	Fleisher et al.	
	U-31	5,805,624	9-1998	Yang et al.	
	U-32	5,821,171	10-1998	Hong et al.	
	U-33	5,838,708	11-1998	Lin et al.	
	U-34	5,896,408	4-1999	Corzine et al.	
	U-35	5,930,611	7-1999	Okamoto	
	U-36	5,945,718	8-1999	Passlack et al.	
	U-37	5,953,362	9-1999	Pamulapati et al.	
	U-38	6,006,582	12-1999	Bhandari et al.	
	U-39	6,028,693	2-2000	Fork et al.	
	U-40	6,030,453	2-2000	Passlack et al.	
	U-41	6,045,611	4-2000	Ishii et al.	
	U-42	6,069,908	5-2000	Yuen et al.	
	U-43	6,071,780	6-2000	Okamoto et al.	
	U-44	6,094,295	7-2000	Passlack et al.	
	U-45	6,114,079	9-2000	Christian et al.	
	U-46	6,150,677	11-2000	Tanaka et al.	
	U-47	6,207,976	3-2001	Takahashi et al.	
	U-48	6,252,896	6-2001	Tan et al.	
Date:		Examiner's Signature:			

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev: 5/14/2003)	NEIFELD REF: OSEMDB30UPTUS	APPLICATION NO: 10/581,316
	FIRST NAMED INVENTOR: Braddock	
	FILING DATE: June 2, 2006	GROUP ART UNIT: Unknown

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	U-49	6,313,511	11-2001	Noguchi	
	U-50	6,347,049	2-2002	Childress et al.	
	U-51	6,445,015	9-2002	Braddock	
	U-52	6,451,711	9-2002	Braddock, IV	
	U-53	6,573,528	6-2003	Braddock	
	U-54	6,670,651	12-2003	Braddock	
	U-55	4,916,498	4-1990	Berenz	
	U-56	6,121,153	9-2000	Kikkawa	
	U-57	6,347,104	2-2002	Dijaili et al.	
	U-58	5,900,653	5-1999	Suzuki et al.	
	U-59	5,739,557	4-1998	O'Neil et al.	
	U-60	5,912,498	6-1999	Hobson et al.	
	U-61	2,993,814	7/25/1961	Epprecht et al.	
	U-62	4,239,955	12/16/1980	Cho	
	U-63	4,553,022	11/12/1985	Columbo	
	U-64	4,810,526	3/7/1989	Ito et al.	
	U-65	6,162,300	12/19/2000	Bicht	
	U-66	6,936,900	8/30,2005	Braddock, IV	
	U-67	6,989,556	1/24/2006	Braddock, IV	

Date:

Examiner's Signature:

37 CFR 1.98(A)(1) Reference Citation

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev: 5/14/2003)	NEIFELD REF: OSEMD0300UCTUS	APPLICATION NO: 10/581,316
	FIRST NAMED INVENTOR: Braddock	
	FILING DATE: June 2, 2006	GROUP ART UNIT: Unknown

LISTING OF UNITED STATES PUBLISHED APPLICATIONS

[illegible]

Date:	Examiner's Signature:
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NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev. 5/14/2003)	NEIFELD REF: OSEMD830UPCTUS	APPLICATION NO: 10/581,316
	FIRST NAMED INVENTOR: Braddock	
	FILING DATE: June 2, 2006	GROUP ART UNIT: Unknown

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37 CFR 1.98(A)(1) Reference Citation

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev. 5/14/2003)	NEIFELD REF: OSEMDB30UPCTUS	APPLICATION NO: 10/581,316
	FIRST NAMED INVENTOR: Braddock	
	FILING DATE: June 2, 2006	GROUP ART UNIT: Unknown

LISTING OF NON PATENT LITERATURE

EXAMINER INITIALS	REFERENCE NUMBER (O Series)	PUBLICATION DATE	INCLUDE IN SEQUENCE: Name of first author (in CAPITAL LETTERS), Title in quotation marks, name of publication, date of publication, page numbers, publisher, city of publication, and country of publication	ENGLISH LANGUAGE TRANSLATION ATTACHED? (YES OR NO) AND/OR OR IDENTIFICATION OF PRIORITY APPLICATION IN WHICH REFERENCE IS CITED
	O-1	1994	"1995-1996 Alfa AESAR Catalog," 1994, page 1244, Johnson Matthey Catalog Company, Inc., Ward Hill, MA, US.	
	O-2	6-2001	VURGFTMAN et al., "Band Parameters for III-V Semiconductors and Their Alloys," J. Appl. Phys. PP 5816-5875 (June 1, 2001).	
	O-3	2003	"Gallium Oxide on Gallium Arsenide: Atomic Structure, Materials, and Devices," Chapter 12, either published or scheduled for publication in "Gallium Oxide on Gallium Arsenide: Atomic Structure, Materials, and Devices," in III-IV Semiconductor Heterostructures: Physics and Devices, edited by W.Z. Cai, Transworld Research Publisher, Kerala, India (2003).	
	O-4	7-1996	PASSLACK et al., "Thermodynamic and photochemical stability of low interface state density Ga2O3-GaAs structures fabricated by in-situ molecular beam epitaxy", Applied Physics Letters, Vol 69, No 3, pps 302-304, 15 July 1996.	
	O-5	6-1997	PASSLACK et al., "Recombination velocity at oxide-GaAs interfaces fabricated by in-situ molecular beam epitaxy", Applied Physics Letters, Volume 68, Number 25, pages 3605-3607, 17 June 1997.	
	O-6	2-1996	PASSLACK et al., "Quasistatic and high frequency capacitance-voltage characterization of Ga2O3-GaAs structures fabricated by in-situ molecular beam epitaxy", Applied Physics Letters, Volume 68, Number 8, pages 1099-1101, 19 February 1996.	
	O-7	8-1997	UEDA et al., "Anisotropy of electrical and optical properties in B-Ga2O3 single crystals", Applied Physics Letters, Volume 71, Number 7, Pages 933-935, 18 August 1997.	

Date:	Examiner's Signature:
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37 CFR 1.98(A)(1) Reference Citation

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev. 5/14/2003)	NEIFELD REF: OSEMDB30UPCTUS	APPLICATION NO: 10/581,316
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	O-8	6-1997	UEDA et al., "Synthesis and control of conductivity of ultraviolet transmitting B-Ga ₂ O ₃ single crystals", Applied Physics Letters, Volume 70, Number 26, pages 3561-3563, 30 June 1997.	
	O-9	2-2000	KHAN et al., "AlGaIn/GaN Metal Oxide Semiconductor Heterostructure Field Effect Transistor", IEEE Electron Device Letters, Volume 21, Number 2, pages 63-65, Feb. 2000.	
	O-10	3-2004	Takebe et al., "GaAs-MISFETs With Insulating Gate Films Formed by Direct Oxidation and by Oxinitridation for Recessed GaAs Surfaces	
	O-11	1965	Becke et al., "Gallium Arsenide MOS Transistors," Solid-State Electronics, Pergamon Press 1965, Vol. 8, pp. 813-823.	
	O-12	1996	Passlack et al., "C-V and G-V Characterization of In-Situ Fabricated Ga ₂ O ₃ -GaAs Interfaces for Inversion/Accumulation Device and Surface Passivation Applications, Solid-State Electronics, Vol. 39, No. 8, pp. 1133-1136, 1996.	
	O-13	1996	Passlack et al., "GaAs Surface Passivation Using in-Situ Oxide Deposition," Applied Surface Science 104/105 (1996) 441-447.	
	O-14	June 1995	Passlack et al., "Infrared Microscopy Studies on High-Power InGaAs-GaAs-InGaP Lasers with Ga ₂ O ₃ Facet Coatings," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 1, No. 2, June 1995, pp. 110-116.	
	O-15	12/15/1995	Passlack et al., "Capacitance-Voltage and Current-Voltage Characterization of Al _x Ga _{1-x} As-GaAs Structures," J. Appl. Phys. 78 (12), December 15, 1995, pp. 7091-7098.	
Date			Examiner's Signature:	

37 CFR 1.98(A)(1) Reference Citation

NEIFELD IP LAW REFERENCE FORM LIST OF REFERENCES CITED BY THE APPLICANT (Rev. 5/14/2003)	NEIFELD REF: OSEMDB30UPCTUS	APPLICATION NO: 10/581,316
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	O-16	1997	Hong et al., "Novel Ga ₂ O ₃ (Gd ₂ O ₃) Passivation Techniques to Product Low Dit Oxide-GaAs Interfaces," Journal of Crystal Growth 175/176 (1997), pp. 422-427.	
	O-17	May 1996	Hong et al., "Low Interface State Density Oxide-GaAs Structures Fabricated by in Situ Molecular Beam Epitaxy," J. Vac. Sci. Technol. B 14(3), May/June 1996, pp. 2297-2300.	
	O-18	Feb 1997	Passlack et al., "Low Dit, Thermodynamically Stable Ga ₂ O ₃ -GaAs Interfaces: Fabrication, Characterization, and Modeling," IEEE Transactions on Electron Devices, Vol. 44, No. 2, February 1997.	
	O-19	12/21/2004	European Patent Office Supplementary European Search Report for Application Number EPO1956104.	
	O-20	6/15/2005	International Search Report for PCT/US04/38235.	
	O-21	10/26/2005	International Search Report for PCT/US04/38582.	
	O-22	10/29/2001	International Search Report for PCT/US01/24263.	
	O-23	4/4/2002	International Search Report for PCT/US01/25150.	
	O-24	12/20/2001	International Search Report for PCT/US01/25259.	
	O-25	1/16/2002	International Search Report for PCT/US01/25161.	

Date: /Maureen Gramaglia/	Examiner's Signature: 06/08/2009
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Printed: June 19, 2006 (11:39am)

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